

### ABSTRACT

The present invention relates to the use of alpha-lactalbumin in the preparation of preparations to be used in therapeutic or prophylactic treatment and/or for diagnostic use for infections, preferably of the respiratory tract, caused by bacteria, in particular *S. pneumoniae* and/or *H. influenzae*. The present invention further relates to essentially pure protein complexes comprising alpha-lactalbumin and the use of these protein complexes for therapeutically or prophylactically treating a bacterial infection, especially infections of the respiratory tract caused by *S. pneumoniae* and/or *H. influenzae*.